

THE CLAIMS

1. (Previously Presented) A method of fermenting a liquid medium with a yeast slurry from a previous fermentation, the method comprising the steps of:

(a) providing an undiluted yeast slurry from a previous fermentation having 40 g/l yeast to 80 g/l yeast on a dry weight basis, wherein the yeast experienced anaerobic conditions in the previous fermentation;

(b) passing at least a portion of the yeast slurry through a membrane contactor, the contactor comprising at least one hydrophobic, microporous membrane, the membrane having a liquid side and a gas side, wherein the contactor is connected to an oxygen source, and wherein at least a portion of the yeast slurry is in proximity to the membrane on the liquid side;

(c) delivering oxygen from the oxygen source to the gas side of the membrane under conditions that cause at least a portion of the oxygen to transfer from the gas side of the membrane to the yeast slurry such that the k_La is at least 0.005 sec^{-1} ;

(d) determining an oxygen uptake rate of the yeast slurry;

(e) increasing an oxygen delivery pressure on the gas side of the membrane and increasing a liquid pressure on the liquid side of the membrane in dependence on the oxygen uptake rate wherein the liquid pressure on the liquid side of the membrane is kept higher than the oxygen delivery pressure on the gas side of the membrane; and

(f) thereafter pitching a liquid medium with the yeast slurry.

2. (Original) The method of claim 1, wherein the yeast slurry is circulated in a closed system between a yeast tank and the membrane contactor.

3. (Cancelled)

4. (Previously Presented) The method of claim 1, wherein the medium is wort.

5. (Original) The method of claim 4, wherein the wort is aerated prior to pitching.

6. (Original) The method of claim 4, wherein the wort is not aerated prior to pitching.

7-9. (Cancelled)

10. (Previously Presented) The method of claim 1, wherein the k_La is at least 0.1 sec^{-1} .

11. (Previously Presented) The method of claim 1, wherein the k_La is at least 0.4 sec^{-1} .
12. (Previously Presented) The method of claim 2 wherein:
the oxygen uptake rate of the yeast slurry is determined from a first dissolved oxygen concentration reading taken in the yeast tank and a second dissolved oxygen concentration reading taken downstream of the membrane contactor.